AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

The list of currently pending claims is presented below.

Claims 1.-128. (Canceled) 1 (Previously presented) A device comprising: 1 Claim 129. a first substrate having a surface; 2 3 a second substrate having a surface, said first substrate and said second substrate being aligned such that said surface of said first substrate opposes said surface of said 4 second substrate; 5 a first organic layer attached to said surface of said first substrate, wherein said first 6 organic layer comprises a first recognition moiety; and 7 8 a mesogenic layer between said first substrate and said second substrate, said mesogenic 9 layer comprising a plurality of mesogenic compounds. **Claim 130.** (Previously presented) The device according to claim 129, further comprising a 1 2 second organic layer attached to said second substrate. Claim 131. (Previously presented) The device according to claim 130, wherein said second 1 organic layer comprises a second recognition moiety. 2 Claim 132. 1 (Previously presented) The device according to claim 130, wherein said first 2 recognition moiety and said second recognition moiety are the same. Claim 133. (Previously presented) The device according to claim 131, wherein said first 1 2 recognition moiety and said second recognition moiety are different.

l	Claim 134. (Previously presented) The device according to claim 129, wherein said organ	110
2	layer comprises a member selected from the group consisting of organosulfur,	
3	organosilanes, amphiphilic molecules, cyclodextrins, polyols, fullerenes and	
4	biomolecules.	
1	Claim 135. (Previously presented) The device according to claim 130, wherein said first	
2	organic layer and said second organic layer are different.	
1	Claim 136. (Previously presented) The device according to claim 130, wherein said first	
2	organic layer and said second organic layer are the same.	
1	Claim 137. (Previously presented) The device according to claim 129, wherein said organ	nic
2	layer comprises a member selected from the group consisting of:	
3	$(RO)_3$ -Si-R ¹ - $(X^1)_n$	
4	wherein,	
5	R is an alkyl group;	
6	R^1 is a linking group between silicon and X^1 ;	
7	X1 is a member selected from the group consisting of reactive groups and	
8	protected reactive groups; and	
9	n is a number between 1 and 50.	
1	Claim 138. (Previously presented) The device according to claim 137, wherein R is a	
2	member selected from the group consisting of methyl and ethyl groups.	
1	Claim 139. (Previously presented) The device according to claim 137, wherein R ¹ is a	
2	member selected from the group consisting of stable linking groups and cleaveable	
3	linking groups.	
1	Claim 140. (Previously presented) The device according to claim 139, wherein R ¹ is a	
2	member selected from the group consisting of alkyl, substituted alkyl, aryl, arylalkyl,	
3	substituted aryl, substituted arylalkyl, saturated cyclic hydrocarbon, unsaturated cycli	с
	Page 4 of 24	

4	hyc	drocarbon, heteroaryl, heteroarylalkyl, substituted heteroaryl, substituted
5	het	eroarylalkyl, heterocyclic, substituted heterocyclic and heterocyclicalkyl groups.
1	Claim 141	. (Previously presented) The device according to claim 139, wherein R ¹ comprises
2	a m	noiety which is a member selected from group consisting of disulfide, ester, imide,
3	car	bonate, nitrobenzyl phenacyl and benzoin groups.
1	Claim 142	(Previously presented) The device according to claim 139, wherein R ¹ is a
2	me	mber selected from the group consisting of alkyl and substituted alkyl groups.
1	Claim 143	3. (Previously presented) The device according to claim 137, wherein X^1 is a
2	me	mber selected from the group consisting of carboxylic acid, carboxylic acid
3	der	rivatives, hydroxyl, haloalkyl, dienophile, carbonyl, sulfonyl halide, thiol, amine,
4		fhydryl, alkene and epoxide groups.
1	Claim 144	(Previously presented) A method for detecting an analyte, comprising:
2	cor	ntacting with said analyte a recognition moiety for said analyte, wherein said
3		contacting causes at least a portion of a plurality of mesogens proximate to said
4		recognition moiety to detectably switch from a first orientation to a second
5		orientation upon contacting said analyte with said recognition moiety; and
6	det	tecting said second orientation of said at least a portion of said plurality of mesogens,
7		whereby said analyte is detected.
1	Claim 145	5. (Currently amended) The method according to claim 144, wherein the phase of
2	sai	d analyte is a member selected from the group consisting of vapors, gases and liquids.
1	Claim 146	6. (Previously presented) The method according to claim 145, wherein said vapor is
2	a n	nember selected from the group consisting of vapors of a single compound and vapors
3	of	a mixture of compounds.
1	Claim 14	7. (Previously presented) The method of claim 145, wherein said gas is a member
2	sel	lected from the group consisting of a single gaseous compound and mixtures of
3	σa	seous compounds.

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mesogens.

1 **Claim 148.** (Previously presented) The method of claim 145, wherein said liquid is a member 2 selected from the group consisting of a single liquid compound, mixtures of liquid 3 compounds, solutions of solid compounds and solutions of gaseous compounds. 1 Claim 149. (Previously presented) The method according to claim 144, wherein said 2 recognition moiety comprises a member selected from the group consisting of metal ions, 3 metal-binding ligands, metal-ligand complexes, nucleic acids, peptides, cyclodextrins, 4 acids, bases, antibodies, enzymes and combinations thereof. 1 Claim 150. (Previously presented) The method according to claim 144, wherein from about 10 to about 108 mesogens undergo said switching for each molecule of analyte interacting 2 3 with said analyte. (Previously presented) The method according to claim 144, wherein from about 1 Claim 151. 10³ to about 10⁶ mesogens undergo said switching. 2 1 Claim 152. (Previously presented) The method according to claim 144, wherein said first orientation is a member selected from the group consisting of uniform, twisted, isotropic 2 and nematic and said second orientation is a member selected from the group consisting 3 4 of uniform, twisted, isotropic and nematic, with the proviso that said first orientation and 5 said second orientation are different orientations. Claim 153. (Previously presented) The method according to claim 152, wherein said 1 2 detecting is achieved by a method selected from the group consisting of visual 3 observation, microscopy, spectroscopic technique, electronic techniques and 4 combinations thereof. 1 Claim 154. (Previously presented) The method according to claim 152, wherein said visual observation detects a change in reflectance, transmission, absorbance, dispersion, 2 3 diffraction, polarization and combinations thereof, of light impinging on said plurality of

1	Claim 155.	(Previously presented) The method according to claim 153, wherein said
2	micro	scopy is a member selected from the group consisting of light microscopy,
3	polari	zed light microscopy, atomic force microscopy, scanning tunneling microscopy and
4	comb	inations thereof.
1	Claim 156.	(Previously presented) The method according to claim 153, wherein said
2	specti	roscopic technique is a member selected from the group consisting of infrared
3	specti	roscopy, Raman spectroscopy, x-ray spectroscopy, visible light spectroscopy,
4	ultrav	riolet spectroscopy and combinations thereof.
1	Claim 157.	(Previously presented) The method according to claim 153, wherein said
2	electr	onic technique is a member selected from the group consisting of surface plasmon
3	reson	ance, ellipsometry, impedometric methods and combinations thereof.
1	Claim 158.	(Currently amended) A device comprising:
2	a first	substrate having a first surface;
3	a seco	ond substrate having a second surface, said first substrate and said second substrate
4		being aligned such that said first surface opposes of said first substrate opposes
5		said second surface of said second substrate;
6	a first	organic layer attached to said first surface, wherein said first organic layer
7		comprises a first recognition moiety which is bound to said first organic layer,
8		interacts with said analyte, and is selected from a peptide, protein, enzyme, and
9		receptor; and
10	a mes	ogenic layer between said first substrate and said second substrate, said mesogenic
11		layer comprising a plurality of mesogenic compounds.
1	Claim 159.	(Previously presented) The device according to claim 158, further comprising an
2	interio	or portion defined as the area between said first surface and said second surface,
3	where	ein said interior portion allows communication between said analyte and said
4	recog	nition moiety.

1	Claim 160.	(Previously presented) The device according to claim 158, wherein said organic		
2	layer	is a rubbed polymer.		
1	Claim 161.	(Previously presented) The device according to claim 158, wherein said		
2	recog	nition moiety further comprises a biomolecule comprising a member selected from		
3	a poly	ysaccharide and a combination of a polysaccharide and a protein.		
1	Claim 162.	(Previously presented) The device according to claim 158, wherein said first		
2	organ	ic layer comprises a self-assembled organosulfur or organosilane monolayer bound		
3	to said	d first surface; and wherein said first recognition moiety is bound to said self-		
4	assen	nbled monolayer.		
1	Claim 163.	(Previously presented) A device for detecting an interaction between an analyte		
2	and a first or second recognition moiety, said device comprising:			
3	a first	substrate having a first surface;		
4	a first	t organic layer attached to said first surface, wherein said first organic layer		
5		comprises a first recognition moiety which is bound to said first organic layer,		
6		interacts with said analyte, and is selected from a peptide, protein, enzyme, and		
7		receptor; and		
8	a seco	ond substrate having a second surface, said first substrate and said second substrate		
9		being aligned such that said first surface opposes said second surface;		
10	a seco	ond organic layer attached to said first surface, wherein said second organic layer		
11		comprises a second recognition moiety, bound to said first organic layer, which		
12		interacts with said analyte, wherein said second recognition moiety is selected		
13		from an amine, a carboxylic acid, a biomolecule, a drug moiety, a chelating agent		
14		a crown ether, and a cyclodextrin; and		
15	a mes	sogenic layer between said first substrate and said second substrate, said mesogenic		
16		layer comprising a plurality of mesogens, wherein at least a portion of said		
17		plurality of mesogens undergo a detectable switch in orientation upon interaction		

18			between said first recognition moiety and said analyte, whereby said analyte is
19			detected.
1	Claim	164.	(Previously presented) The device according to claim 163, wherein said analyte
2		is a n	nember selected from the group consisting of acids, bases, avidin, organic ions,
3		inorg	anic ions, pharmaceuticals, herbicides, pesticides, agents of war, noxious gases,
4		biom	olecules and combinations thereof.
1	Claim	165.	(Previously presented) The device according to claim 163, wherein said
2		intera	action is a member selected from the group consisting of covalent bonding, ionic
3		bond	ing, hydrogen bonding, van der Waals interactions, repulsive electronic interactions,
4		attrac	etive electronic interactions, hydrophobic interactions, hydrophilic interactions and
5		comb	pinations thereof.
1	Claim	166.	(Previously presented) The device according to claim 163, wherein said first
2		organ	nic layer comprises a self-assembled organosulfur or organosilane monolayer bound
3		to sai	d first surface; and wherein said first recognition moiety is bound to said self-
4		assen	nbled monolayer.
1	Claim	167.	(Previously presented) The device according to claim 163, wherein said second
2		organ	nic layer comprises a self-assembled organosulfur or organosilane monolayer bound
3		to sai	d second substrate; and wherein said second recognition moiety is bound to said
4		self-a	ssembled monolayer.
1	Claim	168.	(Previously presented) A device for detecting an interaction between an analyte
2		and a	first or second recognition moiety, said device comprising:
3		a first	t substrate having a first surface;
4		a first	t organic layer attached to said first surface, wherein said first organic layer
5			comprises a first recognition moiety which is bound to said first organic layer,
6			interacts with said analyte, and is selected from a peptide, protein, enzyme, and
7			receptor; and

8		a seco	nd substrate having a second surface, said first substrate and said second substrate
9			being aligned such that said first surface opposes said second surface;
10		a seco	nd organic layer attached to said first surface, wherein said second organic layer
11			comprises a second recognition moiety, bound to said first organic layer, which
12			interacts with said analyte, wherein said second recognition moiety is selected
13			from a peptide, protein, enzyme, and receptor; and
14		a meso	ogenic layer between said first substrate and said second substrate, said mesogenic
15			layer comprising a plurality of mesogens, wherein at least a portion of said
16			plurality of mesogens undergo a detectable switch in orientation upon interaction
17			between said first recognition moiety and said analyte, whereby said analyte is
18			detected.
1	Claim	169.	(Previously presented) The device according to claim 168, wherein said analyte
2		is a m	ember selected from the group consisting of acids, bases, avidin, organic ions,
3		inorga	nic ions, pharmaceuticals, herbicides, pesticides, agents of war, noxious gases,
4		biomo	lecules and combinations thereof.
1	Claim	170.	(Previously presented) The device according to claim 168, wherein said
2		interac	ction is a member selected from the group consisting of covalent bonding, ionic
3		bondii	ng, hydrogen bonding, van der Waals interactions, repulsive electronic interactions,
4		attract	ive electronic interactions, hydrophobic interactions, hydrophilic interactions and
5		combi	nations thereof.
1	Claim	171.	(Previously presented) The device according to claim 168, wherein said first
2		organi	c layer comprises a self-assembled organosulfur or organosilane monolayer bound
3		to said	first surface; and wherein said first recognition moiety is bound to said self-
4		assem	bled monolayer.
1	Claim	172.	(Previously presented) The device according to claim 168, wherein said second
2.		organi	c layer comprises a self-assembled organosulfur or organosilane monolayer bound

3 to said second substrate; and wherein said second recognition moiety is bound to said 4 self-assembled monolayer. 1 Claim 173. (Previously presented) A device for detecting an interaction between an analyte 2 and a first or second recognition moiety, said device comprising: 3 a first substrate having a first surface; 4 a first organic layer attached to said first surface wherein said first organic layer 5 comprises a first recognition moiety which is bound to said first organic layer and interacts with said analyte; and 6 7 a second substrate having a second surface, said first substrate and said second substrate 8 being aligned such that said first surface opposes said second surface; 9 a second organic layer attached to said first surface, wherein said second organic layer comprises a second recognition moiety which is bound to said second organic 10 11 layer and interacts with said analyte; and a mesogenic layer between said first substrate and said second substrate, said mesogenic 12 13 layer comprising a plurality of mesogens, wherein at least a portion of said plurality of mesogens undergo a detectable switch in orientation upon interaction 14 15 between said first recognition moiety and said analyte, whereby said analyte is 16 detected. 1 Claim 174. (Previously presented) The device according to claim 173, wherein said analyte 2 is a member selected from the group consisting of acids, bases, avidin, organic ions, 3 inorganic ions, pharmaceuticals, herbicides, pesticides, agents of war, noxious gases, 4 biomolecules and combinations thereof. 1 Claim 175. (Previously presented) The device according to claim 173, wherein said interaction is a member selected from the group consisting of covalent bonding, ionic 2 3 bonding, hydrogen bonding, van der Waals interactions, repulsive electronic interactions, attractive electronic interactions, hydrophobic interactions, hydrophilic interactions and 4 5 combinations thereof.

1	Claim 17	6. (Previously presented) The device according to claim 173, wherein said first
2	or	ganic layer comprises a self-assembled organosulfur or organosilane monolayer bound
3	to	said first surface; and wherein said first recognition moiety is bound to said self-
4	as	sembled monolayer.
1	Claim 17	7. (Previously presented) The device according to claim 173, wherein said second
2	or	ganic layer comprises a self-assembled organosulfur or organosilane monolayer bound
3	to	said second substrate; and wherein said second recognition moiety is bound to said
4	se	lf-assembled monolayer.
1	Claim 17	8. (Previously presented) The device according to claim 173, wherein said first
2	or	ganic layer comprises a self-assembled organosulfur or organosilane monolayer bound
3	to	said first surface; and wherein said first recognition moiety is bound to said self-
4	as	sembled monolayer.
1	Claim 17	9. (Previously presented) A device comprising:
2	a t	first substrate having a surface, wherein said surface comprises a recognition moiety,
3		and said recognition moiety and said first substrate are joined through a member
4		selected from direct attachment and indirect attachment through a spacer arm;
5	a r	nesogenic layer oriented on said surface; and
6	an	interface between said mesogenic layer and a member selected from the group
7		consisting of gases, liquids, solids and combinations thereof.
1	Claim 18	0. (Previously presented) The device of claim 179 , wherein said recognition moiety
2	an	d said first substrate are joined through direct attachment, and said direct attachment is
3	thı	rough a member selected from covalent bonding, ionic bonding, chemisorption,
4	ph	ysisorption and combinations thereof.
1	Claim 18	1. (Previously presented) The device of claim 179, wherein said recognition moiety
2	an	d said first substrate are joined through indirect attachment through a spacer arm, and

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wherein said spacer arm comprises a member selected from the group consisting of

4 poly(ethyleneglycol), poly(propyleneglycol), diamines, and surface-active agents. 1 Claim 182. (Previously presented) A device comprising: 2 a first substrate having a surface, wherein said surface comprises a recognition moiety, and said recognition moiety and said first substrate are joined through a member 3 selected from direct attachment and indirect attachment through a spacer arm; 4 a second substrate having a second surface, said first substrate and said second substrate 5 6 being aligned such that said first surface opposes said second surface; 7 a mesogenic layer oriented on said surface; and 8 an interface between said mesogenic layer and a member selected from the group 9 consisting of gases, liquids, solids and combinations thereof. Claim 183. (Previously presented) The device of claim 182, wherein said recognition moiety 1 2 and said first substrate are joined through direct attachment, and said direct attachment is 3 through a member selected from covalent bonding, ionic bonding, chemisorption, physisorption and combinations thereof. 4 Claim 184. (Previously presented) The device of claim 182, wherein said recognition moiety 1 2 and said first substrate are joined through indirect attachment through a spacer arm, and 3 wherein said spacer arm comprises a member selected from the group consisting of 4 poly(ethyleneglycol), poly(propyleneglycol), diamines, and surface-active agents. Claim 185. (Previously presented) A method for measuring the affinity of a recognition 1 2 moiety for an analyte of interest over a pre-bound analyte, said method comprising: (a) contacting a first analyte with a recognition moiety for said first analyte, thus forming 3 a pre-bound analyte 4. 5 wherein said contacting causes at least a portion of a plurality of mesogens proximate to 6 said recognition moiety to detectably switch from a first orientation to a second

orientation upon contacting said first analyte with said recognition moiety;

8	(b) de	tecting said second orientation of said at least a portion of said plurality of	
9		mesogens;	
10	(c) co	ntacting said analyte of interest with said recognition moiety, wherein said	
11		contacting causes at least a portion of a plurality of mesogens proximate to said	
12		recognition moiety to detectably switch from the second orientation to a third	
13	<u></u>	orientation upon contacting said analyte of interest with said recognition moiety;	
14		and	
15	(d) de	tecting the third orientation of said at least a portion of said plurality of mesogens,	
16		whereby the affinity of the recognition moiety for the analyte of interest over the	
17		pre-bound analyte is measured.	
1	Claim 186.	(Previously presented) A device for amplifying an interaction between a first	
2	recogn	nition moiety and an analyte of interest, said device comprising:	
3	a first	substrate having a surface;	
4	a first organic layer attached to said surface of said first substrate;		
5	where	in said first recognition moiety is capable of interacting with an analyte of interest	
6		to form a first recognition moiety-analyte of interest complex; and	
7	a mes	ogenic layer comprising a liquid crystalline material, wherein said mesogenic layer	
8		is in contact with said first recognition moiety, and the formation of said complex	
9		induces a rearrangement in a conformation of said mesogenic layer, and wherein	
10		said mesogenic layer amplifies said interaction.	
1	Claim 187.	(Previously presented) The device of claim 186, wherein the first recognition	
2	moiet	y is an antibody.	
1	Claim 188.	(Previously presented) The device of claim 186, wherein the analyte of interest is	
2	select	ed from a biomolecule, chemical warfare agent, and noxious gas.	
1	Claim 189.	(Previously presented) The device of claim 186, wherein said rearrangement of	
2	said m	nesogenic layer produces an optical signal.	
1	Claim 190.	(Previously presented) A copper(II)-detecting device comprising:	

- a first substrate having a surface;
- a second substrate having a surface, said first substrate and said second substrate being aligned such that said surface of said first substrate opposes said surface of said second substrate;
 - a first organic layer attached to said surface of said first substrate, wherein said first organic layer comprises a first recognition moiety; and
 - a mesogenic layer comprising a plurality of mesogenic compounds comprising a structure according to Formula X:

$$R^{11}$$
 X^{11} R^{21} (X)

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- X¹¹ is a member selected from a bond, Schiff bases, diazo compounds, azoxy compounds, nitrones, alkenes, alkynes, and esters;
- 14 R¹¹ and R²¹ are members independently selected from substituted or unsubstituted
 15 alkyl, substituted or unsubstituted heteroalkyl, substituted or unsubstituted
 16 cycloalkyl, substituted or unsubstituted heterocycloalkyl, substituted or
 17 unsubstituted aryl, substituted or unsubstituted heteroaryl, acyl, halogens,
 18 hydroxy, cyano, amino, alkoxy, mercapto, thia, and aza;
 19 wherein at least one of said R¹¹ and R²¹ is cyano.
 - Claim 191. (Previously presented) The copper(II)-detecting device of claim 190, wherein X^{11} is a bond, R^{21} is pentyl, and R^{11} is cyano.
 - Claim 192. (Previously presented) A sodium-detecting device comprising:
- 2 a first substrate having a surface;
- a second substrate having a surface, said first substrate and said second substrate being aligned such that said surface of said first substrate opposes said surface of said second substrate;

(X)

a first organic layer attached to said surface of said first substrate, wherein said first organic layer comprises a first recognition moiety comprising a carboxylic acid moiety; and

a mesogenic layer comprising a plurality of mesogenic compounds comprising a structure according to Formula X:

$$R^{11}$$
 X^{11} R^{21}

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X¹¹ is a member consisting of a bond, Schiff bases, diazo compounds, azoxy compounds, nitrones, alkenes, alkynes, and esters;

R¹¹ and R²¹ are members independently selected from substituted or unsubstituted alkyl, substituted or unsubstituted heteroalkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, acyl, halogens, hydroxy, cyano, amino, alkoxy, mercapto, thia, and aza; wherein at least one of said R¹¹ and R²¹ is a member selected from cyano, hydroxy, alkoxy, alkylamine, amine, mercapto, and thia.

Claim 193. (Previously presented) The sodium-detecting device of claim 192, wherein X¹¹ is a member selected from a bond and an alkene.

- Claim 194. (Previously presented) The sodium-detecting device of claim 192, wherein R¹¹ is cyano and R²¹ is methoxy.
- 1 Claim 195. (Previously presented) The sodium-detecting device of claim 192, wherein R¹¹ is cyano and R²¹ is pentyl.
- 1 Claim 196. (Previously presented) A hexylamine-detecting device comprising: 2 a first substrate having a surface;

- a second substrate having a surface, said first substrate and said second substrate being aligned such that said surface of said first substrate opposes said surface of said second substrate;
 - a first organic layer attached to said surface of said first substrate, wherein said first organic layer comprises a first recognition moiety comprising a carboxylic acid moiety; and
 - a mesogenic layer comprising a plurality of mesogenic compounds comprising a structure according to Formula X:

$$R^{11}$$
 X^{11} R^{21} X

12 wherein

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Claim 197.

X¹¹ is a member consisting of a bond, Schiff bases, diazo compounds, azoxy compounds, nitrones, alkenes, alkynes, and esters;

(Previously presented) The hexylamine-detecting device of claim 196, wherein

- R¹¹ and R²¹ are members independently selected from substituted or unsubstituted alkyl, substituted or unsubstituted heteroalkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted heteroaryl, acyl, halogens, hydroxy, cyano, amino, alkoxy, mercapto, thia, and aza; wherein at least one of said R¹¹ and R²¹ is a member selected from cyano,
- 21 hydroxy, alkoxy, alkylamine, amine, mercapto, and thia.
- 2 X¹¹ is a member selected from a bond and an alkene.
- Claim 198. (Previously presented) The hexylamine-detecting device of claim 196, wherein R¹¹ is cyano and R²¹ is methoxy.
- Claim 199. (Previously presented) The hexylamine-detecting device of claim 196, wherein R¹¹ is cyano and R²¹ is pentyl.

I	Claim 200.	(Currently amended) A method of detecting an analyte, comprising:
2	(a) in	teracting said analyte with a surface comprising a recognition moiety, thereby
3		forming an analyte-recognition moiety complex, said surface comprising:
4		(i) a substrate;
5		(ii) an organic layer bound to said substrate; and
6		(iii) said recognition moiety bound to said organic layer;
7	(b) co	ontacting said analyte-recognition moiety complex with a mesogenic layer, thereby
8		causing at least a portion of a plurality of mesogens proximate to said recognition
9		moiety to detectably switch from a first orientation to a second orientation[[,]];
10		and
11	<u>(c)</u> de	etecting said second orientation of said at least a portion of said plurality of
12		mesogens, whereby said analyte is detected.
1	Claim 201.	(Currently amended) A method of detecting an analyte, comprising:
2	(a) in	teracting said analyte with a surface comprising said recognition moiety, said
3		surface comprising:
4		(i) a substrate;
5		(ii) an organic layer bound to said substrate; and
6		(iii) said recognition moiety bound to said organic layer;
7	(b) co	ontacting said analyte with an organic mesogenic layer, thereby causing at least a
8		portion of a plurality of mesogens proximate to said recognition moiety to
9		detectably switch from a first orientation to a second orientation upon contacting
10		said analyte with said recognition moiety; and
11	<u>(c)</u> de	etecting said second orientation of said at least a portion of said plurality of
12		mesogens, whereby said analyte is detected.
1	Claim 202.	(Previously presented) A method for detecting an analyte, comprising:
2	intera	cting said analyte and a mesogenic layer, wherein said interacting causes at least a
3		portion of a plurality of mesogens to detectably switch from a first orientation to a
4		second orientation; and

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- detecting said second orientation of said at least a portion of said plurality of mesogens,
- 6 whereby said analyte is detected.